

2. Note on a Peculiarity in the Trachea of the Twelve-wired Bird-of-Paradise (*Seleucides nigra*). By W. A. FORBES, B.A., Prosector to the Society.

[Received March 7, 1882.]

The death (from congestion of the lungs, with resulting hæmorrhage, and thickening of the walls of the intrathoracic air-cells) on Feb. 22nd last of the male *Seleucides nigra*, purchased by the Society on March 19, 1881<sup>1</sup>, has given me the opportunity of observing a peculiarity in the construction of its trachea of a nature unlike any thing of the kind yet known to me. The windpipe, for the greater part of its course, has the normal avian structure, the tracheal rings, which are ossified and, as usual, notched both before and behind, being of the ordinary form, and separated by but narrow intervals from each other. For a space, however, of about 1 inch above the largely developed short pair of intrinsic muscles, the interval comprising 8 tracheal rings, it becomes peculiarly modified, the tube itself becoming slightly dilated and flattened antero-posteriorly, whilst the tracheal rings become broader, and ossified along the middle of their depth, the borders only remaining cartilaginous. This ossified part of each ring is slightly concave, so that when seen laterally the cartilaginous margins project slightly from it, the whole ring being thus like a fluted table-napkin ring, when seen in section. The intervals between these peculiar rings are very much deeper than those above, and occupied by delicate membrane only, so that all this part of the trachea is highly elastic.

The *sterno-tracheales* are inserted just below the lowest of these peculiar rings, which is the last but three of those composing the trachea—the next two, which are very narrow, and the last, which is broad and bears the pessulus, being concealed from view by the largely developed syringeal muscles, of which there are four pairs, all, except the small anterior long muscle, being inserted on the ends of the very strong third bronchial semirings. The lateral tracheal muscles are weak, extending, however, nearly to the thoracic end of the tube.

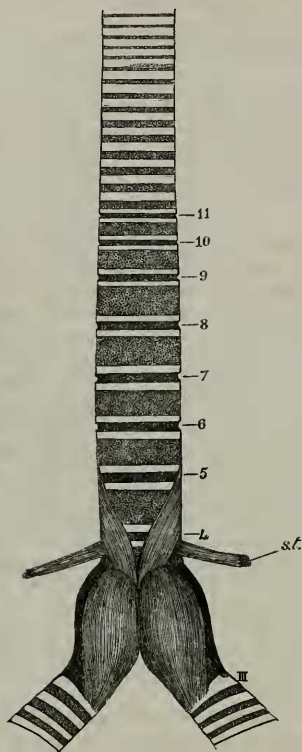
Nothing like the modification of the trachea here described obtains in any other allied form of Paradise-bird that I have been able to examine (including *Paradisæa papuana* and *rubra*, *Ptilorhis alberti*, *Phonygama gouldi*, *Manucodia atra*, *Ptilorhynchus violaceus* and *smithi*); nor do I know any structure in other birds quite comparable with that now described, which is probably correlated with the very loud harsh note of these birds<sup>2</sup>.

In all other respects *Seleucides* is, as might have been expected, a typical oscine Passerine.

<sup>1</sup> See P. Z. S. 1881, p. 450.

<sup>2</sup> Mr. Wallace, speaking of this species, says (Malay Archipelago, ii. p. 254, London, 1869):—"It has a loud shrill cry, to be heard a long way, consisting of cáh, cáh, repeated five or six times in a descending scale; and at the last note it generally flies away."

I may take this opportunity of remarking that the various published figures of *Seleucides nigra* do not give a very accurate idea of the bird, as they fail to represent the peculiar way in which the leg-feathering ceases altogether some way above the "knee," leaving



Lower portion of trachea of *Seleucides nigra* ♂, from before. Twice the natural size.

4, 5, 6, 7, 8, 9, 10, 11. Fourth, fifth, &c. (from bottom) tracheal rings, peculiarly modified. III. Third bronchial semiring. *s.t.*, *sterno-trachealis* muscle, cut short.

the large and muscular legs bare for about an inch or so above that joint.

The eyes are brilliant red; the legs, including the bare skin above the "knees," pale red, the claws greyish. The mucous membrane of the mouth and superior surface of the tongue is bright emerald-

green, a narrow line of this appearing at the angle of the mouth when the jaws are closed. When the beak is open, the beautiful green of the mouth and tongue is very conspicuous, and, contrasting with the bright red eye and dark velvety plumage of the head, adds greatly to the general appearance of the bird.

It would be interesting to know whether the females of *Seleucides* also have their mouth thus coloured, or whether it is a peculiarity of the male, developed as a sexual ornament<sup>1</sup>.

3. A Note on *Strix oustaleti*, Hartlaub. By R. BOWDLER SHARPE, F.L.S., F.Z.S., &c., Department of Zoology, British Museum.

[Received March 9, 1882.]

In the 'Proceedings' of this Society for 1879, Dr. Hartlaub described a Barn-Owl from the island of Vitu-Levu, which he called *Strix oustaleti*. I have recently had a pair of Owls submitted to me by Professor J. F. Blake of the University College, Nottingham—to the Museum of which they had been presented by Mr. Fillingham Parr, who procured them in the Fiji Islands.

I recognized, as I thought, *Strix oustaleti*; and on comparing the birds with Dr. Hartlaub's description I found there could be no doubt on the subject; but I could see at the same time that the bird was no true Barn-Owl, but a Grass-Owl, in fact our old friend *Strix candida*, probably occurring in Fiji on one of its migrations, which have proved so disastrous to the simplicity of its nomenclature.

As long as this Owl remained in India its synonymy consisted simply of two names—the original one of *candida* of Tickell, and *longimembris* of Jerdon; but on a Philippine specimen being discovered, it was named *S. amauronota* by Dr. Cabanis; and in the same year (1866) Mr. Swinhoe found it in Formosa and called it *S. pithecopis*. Shortly after, it turned up in Queensland, only to be named *Strix walleri* by Mr. Diggles; and now its last appearance, in the Fiji islands, has gained it the additional cognomen of *S. oustaleti*.

Dr. Hartlaub cannot, I think, have got in the Bremen Museum a specimen of a Grass-Owl, or he could not have failed to see that *S. oustaleti* belonged to the *Strix candida* section; for of course, if compared with *Strix delicatula* and *S. personata* &c., the Fiji Grass-Owl comes out distinct enough. I do not think, from the absence of reference on Dr. Hartlaub's part to my 'Catalogue,' that he has done me the honour of consulting my work, published four years before his paper. On looking at the 'Key to the Species' of the genus *Strix* as given by me (Cat. B. Brit. Mus. ii. p. 290), I had not any difficulty in recognizing *Strix oustaleti* under the name of *Strix candida*.

<sup>1</sup> P.S. (April 7).—A young male Rifle-bird (*Ptilorhis paradisea*) now living in the Society's Gardens has, it is interesting to observe, its mouth and tongue similarly brightly coloured, though of a lemon-yellow colour instead of green.